UNITED S ATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
WATER MANAGEMENT DIVISION
SOUTH FLORIDA OFFICE
400 NORTH CONGRESS AVE., SUITE 120
WEST PALM BEACH, FLORIDA 33401

MAY 04 2001

Colonel James G. May, Dis ict Engineer
Department of the Army
Jacksonville District Corps f Engineers
Attn: Brice McKoy
400 North Congress Avenu , Suite 130
West Palm Beach, Fl 3340

SUBJECT: Phipps Ocean I urk
200000380(IP- 3M)

Dear Colonel May:

This letter is in resp se to permit application number 200000380(IP-BM) submitted by the Town of Palm Beach. he purpose of the project is to restore and stabilize 10,032 linear feet of beach shoreline along P ipps Ocean Park Beach with 1.5 million cubic yards of ocean dredged sand material. The dredge material would be obtained from 2 borrow areas located 0.34 miles offshore, between Departn nt of Natural Resources (DNR) monuments R-127 and R-134. The project is located in the At ntic Ocean, between DNR monuments R-116 and R-126, in Sections 11, 14, and 23, T wnship 44 South, Range 43 East, Town of Palm Beach, Palm Beach County, Florida.

The U.S. Environm ital Protection Agency (EPA) has reviewed the applicant's response letter dated January 25, 20 1, and subsequent submittals regarding our concerns with the proposed project. In lette dated May 5, 2000, and June 1, 2000, we requested additional information and expresse our concern with the environmental impacts the proposed project would have on nearshore l ard bottom resources of national importance. On April 26, 2001, members of my staff cond cted a follow up site inspection to determine current conditions of the site. This letter summariz s EPA's position on the project, concentrating especially on Section 404(b)(1) Guidelines, whi h prohibit avoidable or significant adverse impacts to the aquatic environment.

The applicant's "Pr ject Justification Report," states that the effects of the Lake Worth Inlet and construction of s awalls with rip-rap along a 3-mile segment north of the project have resulted in erosion within he project area and exposure of nearshore hard bottom resources. If the "no action alternati e" is taken to alleviate the sediment losses within the project area, the beach will continue to er le resulting in loss of recreational beach, loss of turtle nesting habitat, and increased risk of dam ge to upland property. In addition, the applicant stated that any fill placed within Phipps Oce n Park Beach would result in accretion of sand material in the region of the golf course. This a cretion would occur in concert with rapid erosion of the fill area resulting in escarpments n the fill area and poor public perception of the project performance.

The applicant concludes tl at the only practicable alternative available is to place fill material along the entire length of t ie project as proposed in the public notice. Based on our review and site inspection, EPA main uins that the project is not necessary, nor in the public interest and the potential environmental h: m outweighs the benefit. During our site inspection on April 26, 2001, we determined that pproximately 75 to100 feet of beach remains along the entire project site between the high tide ne and the dune system. This observation was made during a high tide, and we did not obser e any critical erosion areas which would threaten the loss of upland development, recreational nterests, or wildlife habitat. To the contrary, the inspection revealed the location of 3 sea turtle iests on the upland beach and nearshore hard bottom resources along 80 percent of the project s e. The nearshore hard bottom structure associated with this project is colonized by an ecologica y diverse community of algae, porifera, and cnidaria, and provides important shallow water f h habitat. Several lines of evidence suggest the nearshore hard bottom habitats along the ast coast of Florida can serve as nursery areas for many coastal fish species and can support cc siderable larval abundances (Lindeman, Snyder 1999). This project is within an area identifiec as Essential Fish Habitat by the South Atlantic Fishery Management Council(SAFMC) and the National Marine Fisheries Service (NMFS) for federally managed species. Hard bottom hab ats are defined as Habitat Areas of Particular Concern in the Fishery Management Plan Amend nents by the SAFMC (NMFS 1999). For these reasons, EPA considers the hard bottom abitats found within this project site aquatic resources of national importance.

The applicant states that the City of Lake Worth is the owner of the outfall structure which is located within borrow a ea III. The applicant was informed by the City of Lake Worth that the outfall is inactive and has ot been used for at least the past ten years, but is maintained as a potential emergency disch rge. The applicant concludes that since the outfall has been inactive for the past ten years, it is xpected that no treated sewage from the pipe has infiltrated the sediments within the borr w area. EPA requests that U.S. Army Corps of Engineers (USACE) require the applicant to te this site for contaminants before approving its use as a borrow area for any future projects. F rthermore, EPA believes that the impacts to sand borrow areas and their associated macro-in rtebrate communities from the dredging operation may be more extensive and long-term t an has been suggested in assessments of previous beach nourishment projects (USACE 1987, 1 94, and 1996). Previous studies had concluded that perturbations within borrow areas were egligible due to rapid re-establishment of the infaunal communities. However, re-examination of the data from the borrow and reference areas of four beach renourishment projects or the southeast coast of Florida, found that changes to the infaunal community structure may ersist for 2-3 years or more (Wilbur and Stern 1992). Other studies have shown a decrease in liversity and abundance of the infaunal community in borrow areas several years following th dredging (Turbeville and Marsh 1982; Goldberg 1989). The impacts that such projects have or macro-invertebrate communities should be considered as significant because they are either di ctly, or indirectly, a major portion of the diet for many fish and macrocrustaceans (Baird nd Ulanowicz 1989). The State of Florida and the Florida Keys

National Marine Sanctuary ıave prohibited the collection of "live sand" (i.e. sand material, typically containing a high liversity of algal, bacterial and macroinvertabrate species, used in the aquarium industry) within · ıe Sanctuary, stating that the sand substrate is an important habitat for grazers and detritivores an< the removal of this habitat was determined to adversely impact marine productivity, fisher :s, wildlife habitat, and water quality (FDEP 1998). In review of the adverse effects this project nay have on EFH, EPA requests the applicant conduct an environmental assessment 'ithin the boundaries of the borrow areas.

EPA is also opposed › the project until the applicant provides a mitigation plan that adequately compensates fo unavoidable impacts to nearshore hard bottom resources. The project toe of fill proposed :xtends 430 to 570 feet offshore and will impact approximately 5.17 acres of nearshore har . bottom. The applicant states by using the time averaging method, the construction of a 2.20 ± :re artificial reef would provide adequate compensation for impacts to 5.17 acres of hard bottom ı sources. EPA concludes that it is premature to review the applicant's proposed mitigation plan v ıen impacts to nearshore hard bottom are at an unacceptable level. We request the USACE re· ıew other practicable alternatives to what is proposed to reduce or eliminate impacts to near s ore hard bottom. EPA will then consider mitigation at a minimum 1:1 ratio, after the applican has avoided and/or minimized hard bottom impacts to the extent practicable.

In accordance with t e procedural requirements of the 1992 404(q) Memorandum of Agreement Part IV, 3(b), v ± continue to advise you that the proposed work will result in substantial and unacceptab ± adverse impacts on aquatic resources of national importance. EPA concludes that the nearsho ± hard bottom resources of this project should be protected.

Thank you for the oj ›ortunity to comment on this request for authorization. If you should have any questions, please :ontact Ron Miedema at the letterhead address or by telephone at 561-616-8741.

Sincerely,

Richard M. Harvey, P.E.
Director

cc: FWS, Vero Beach, FL
NMFS, Miami, FL

References

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